WHAT IS CLAIMED IS:

1. A shutter-driving device combined with a diaphragm, comprising:

a base member having a predetermined thickness;

an aperture having a predetermined diameter and formed through the base member; and

a light-adjusting member closing the aperture or adjusting the degree of opening thereof by driving a driving source,

wherein an ND filter capable of adjusting the intensity (the quantity) of light that passes through the aperture is supported by the base member,

wherein the movement of the ND filter is locked in a state where the aperture is not shielded when the light-adjusting member opens the aperture, and

wherein, in the state where the aperture is not shielded, the locking of the ND filter is released in synchronization with the operation of the light-adjusting member of closing the aperture so as to shield the aperture.

2. The shutter-driving device combined with a diaphragm according to Claim 1, wherein the ND filter whose locking is released changes the degree of shielding the aperture in synchronization with the movement of the light-adjusting member that adjusts the degree of opening the aperture.

3. The shutter-driving device combined with a diaphragm according to Claim 1,

wherein a ring-shaped driving ring that supports a part of the light-adjusting member so as to move freely is mounted on the base member, and

wherein a plurality of the light-adjusting members move to the positions in which the aperture is opened and to the positions in which the aperture is closed in cooperation with the rotation of the driving ring.

4. The shutter-driving device combined with a diaphragm according to Claim 1,

wherein the ND filter is supported by a supporting member whose one end is supported by a part of the base member on the outer circumference of the driving ring so as to freely rotate, and

wherein a locking member capable of locking the movement of the supporting member in the state where the ND filter does not shield the aperture is arranged in a portion of the base member where the one end of the supporting member is positioned.

5. The shutter-driving device combined with a diaphragm according to Claim 4,

wherein the supporting member is elastically biased by a first elastic member in a direction in which the ND filter shields the aperture and the locking member

elastically biased by a second elastic member elastically contacts one end of the supporting member so that the ND filter in the state where the aperture is not shielded is locked.

6. The shutter-driving device combined with a diaphragm according to Claim 5,

wherein the biasing force of the second elastic member is larger than the biasing force of the first elastic member.

7. The shutter-driving device combined with a diaphragm according to Claim 4,

wherein, when the locking of the supporting member by the locking member is released, the ND filter moves from the position in which the aperture is not shielded to the position in which the aperture is shielded by the biasing force of the first elastic member.

8. The shutter-driving device combined with a diaphragm according to Claim 4,

wherein an unlocking portion capable of rotating the driving ring in a direction in which the light-adjusting member closes the aperture so that the locked supporting member is pressed to release the locking of the supporting member is formed in the driving ring.

9. The shutter-driving device combined with a

diaphragm according to Claim 4,

wherein the supporting member rotates in synchronization with the rotation of the driving ring in the direction in which the light-adjusting member opens the aperture so that the ND filter moves from the position in which the aperture is shielded to the position in which the aperture is not shielded.

10. The shutter-driving device combined with a diaphragm according to Claim 3,

wherein an operation pin capable of moving the ND filter from the state where the aperture is shielded to the position in which the aperture is not shielded against the biasing force of the first elastic member is formed in the driving ring.

11. The shutter-driving device combined with a diaphragm according to Claim 3,

wherein the driving source includes an electro-magnetic actuator, and

wherein the driving ring rotates at a predetermined angle of rotation in cooperation with the reciprocating motion of a driving lever directly connected to the driving source in one direction and in the other direction.

12. The shutter-driving device combined with a diaphragm according to Claim 11,

wherein an engaging groove with which the driving lever engages is formed in the driving ring,

wherein elongated holes with which protrusions formed in the driving ring engage are formed in the plurality of light-adjusting members,

wherein the driving lever engaging with the engaging groove of the driving ring engages with the elongated hole of the one light-adjusting member, and

wherein the protrusions formed in the driving ring engage with the elongated holes of the remaining light-adjusting members.